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LAURENS PERSEUS HICKOK

By JOHN BASCOM

Of all the men whom I have known Laurens P. Hickok was best fitted to command high and uniform respect. One might be drawn to him or remain relatively indifferent to him, but once within the circle of his influence one could not do otherwise than cherish for him warm esteem. He was not a man whose affections and passions nestled close together, or whose imagination, like a strong wind, bore him and others with him in new and unexpected directions; but his feelings and his thoughts were so vigorous, so perfectly interfused, so transparent in their scope, that they retained the attention they had once arrested. Sentiment was so dissolved in a fitting intellectual medium that one hardly thought of it, or felt it, separately.

This mastery was the more remarkable as he had occasion to present a system of theology which has made so much of authority, and which, although appealing to reason, has surrounded itself with so many narrow, personal and conventional motives. His own mind was satisfied with the inherent rationality of his beliefs, and on this ground he habitually presented and enforced them. He felt them to be perfectly open to inquiry, and that the reasons on which they rested were an essential part of them. He invited investigation as the fitting medium of conviction. He stood frankly and fearlessly on the basis of truth, feeling that only thus could that assurance be reached which comes to every mind in the successful use of its own powers; an assurance quite beyond any gloss of rhetoric or dexterity of logic. Personal motives weighed so little with him that he was hardly aware of their existence in others. That self-consciousness, that consciousness of surrounding circumstances and claims, which even good men with difficulty escape, left him unembarrassed; alone with the truth, his own thoughts and the thoughts of others concerning it. What he said was his personal conviction. No matter from what source it originally came, he was only interested in opening up to the minds of others this one royal and independent road. The air is air for us all, and native to every man's lungs.

I first met him in the fall of 1851, holding the chair of systematic theology in Auburn Theological Seminary, which at

that time commanded a good attendance. It was the most important position he ever held, and the one best fitted to his powers at the period of their full vigor. There is no weightier demand ever made on the mind and heart of a teacher than that made by young men, finishing a course of study by a consideration of the spiritual problems which determine the significance of life; problems which are to define our own action toward life and help us in our guidance of the actions of others. The student may have made many acquisitions, have entertained and passed through many inquiries, but these last questions, for the sake of which all other questions have been put, remain to receive a fitting answer, casting light before and behind till the day dawns upon the waiting spirit. It was in this temper of expectancy that my class was present, and however far off and ineffectual the conclusions reached may have been, they were sought after and waited for as cold water by a thirsty man.

Laurens Perseus Hickok was born in Bethel, Fairfield County, Connecticut, December 29, 1798. He was brought up on a farm and came into possession of a sturdy physical constitution which stood by him during a long life. He was graduated at Union College, studied theology and entered on his ministerial work in 1822. He first preached at Kent, a small township in Litchfield County, Conn. He was called thence to Litchfield to occupy the pulpit vacated by Doctor Lyman Beecher. In 1836 he was invited to take the professorship of theology at Western Reserve. Here he remained eight years, and then accepted the same professorship at Auburn Theological Seminary. This he also held for eight years. As a preacher he was simple, thoughtful, effective. Instruction was imparted and reflection called out by his discourses. In 1852 he became vice-president of Union College, with the understanding that he was shortly to become president. This expectation was not fully met. He remained at Union till 1868, and was not in complete charge till the last portion of the time. His earlier work was restricted by the presence of President Nott, an able but a very different style of man. Moreover the administrative duties of a college were not those which gave freest play to his powers, nor was the instruction of undergraduates equivalent to that of a seminary class. His presidency at Union, his alma mater, seemed to be the crowning feature of his life's labor, but was hardly so in fact. While it was successful it was less genial and rewardful than previous work. He resigned in 1868, and removed to Amherst, an educational centre and then the home of his nephews, Julius H. Seelye and L. Clark Seelye, who were professors at Amherst College. Here he spent most peacefully and happily his last

years, cherished in the affections of his many pupils. He died May 7, 1888.

Dr. Hickok's philosophical labors, for the sake of which this sketch is written, were very definite and closely interlocked. His first volume, *Rational Psychology or the Subjective Idea and Objective Law of All Intelligence*, was published by Derby, Miller & Company in 1849, Auburn. It contained the prominent conceptions of his later volumes. It gave rise incidentally to two manuals, *Empirical Psychology* and a *System of Moral Science*, used by himself at Union, and also by President Seelye at Amherst. In the line of an extended application of these principles of knowledge came, in 1858, *Rational Cosmology*, in 1872 *Creator and Creation*. In the same year appeared *Humanity Immortal; Man Tried, Fallen and Redeemed*, a psychological justification of his theological system. His work was closed with *The Logic of Reason; True Logic must Strike Root in Reason*, 1875. His later volumes were published by Lee & Shepard, Boston. Doctor Hickok did not depart materially from current orthodoxy, but he gave it interpretation and support by his rational conceptions of the nature of knowledge. He put his own mind at rest on what he felt to be the final statement of human powers. While, therefore, he might approach other systems of doctrine in a formal presentation, his own creed was offered as a universal solvent of ethical, spiritual relations. He urged it as rational, through and through,

His *Rational Psychology* took form in the mind of Doctor Hickok when the Transcendental Philosophy was in the process of development in America, a philosophy which seemed to him to combine fresh insight with wayward and vagrant thought, and to call for a new definition of the nature of knowledge. This he undertook to give in his *Rational Psychology* by a sufficient statement of the necessary conditions of knowledge, of perception, understanding and reason, all standing fast with and by means of each other. The foundations of truth, its ultimate validity, were to be disclosed and vindicated against all confusion and scepticism. He felt that the paths and methods of spiritual thought could be laid down with something of the same exactness and certainty with which the mathematician follows the clues of space relations. It was a fresh survey of the highways of knowledge on which he entered.

There was also in the air the dogmatic assertion of common-sense which went with the Scottish Philosophy; an assertion of certainty rising above analysis and resting on the accumulated convictions of men. It affirmed that knowledge as one whole stands or falls together, that we cannot break in upon it and trample it under foot without scattering it altogether.

This inherent conviction, which the school of Reid dogmatically affirmed, Doctor Hickok strove to bring out into the light of reason and to disclose the self sufficiency of knowledge as one whole. Though its several parts may suffer constant readjustment, these changes, no more than the ever renewed elements in the physical body, do not prevent it from being in the full possession of life.

An empirical psychology is enclosed in a rational psychology as the kernel is contained in the shell. What the latter affirms is that these mental powers, empirically discovered, are the germ of a complete life, self sustained in all its parts. The independent and creative quality of intellectual activity is pointed out, and we are led to see that we are in possession of true knowledge according to the obvious purport of our daily experience. The mind is justified to itself.

There are three forms of mental activity: that of the senses, furnishing the material of perception; that of the reason, giving the forms of knowledge; and that of the understanding, uniting these two in judgments. Each of these three is discussed in reference to its constituents. The elements of knowledge due to the external world, the elements due to the mind itself, and the completed product due to their union in thought, are brought out in their equal and adequate authority.

The chief ideas, or form elements by which crude sensations are transformed into clear perceptions are space and time. These are in no way contained in the sensations themselves but are brought by the mind to that mental construction by which these sensations pass into completed terms of knowledge. The sensation is sterile without the form, and the form is empty without the material given by the sense. Both are dependent and independent; both are essential parts of our knowing. All the efforts of the empiricist to obtain either of these form elements, space or time, in sensation itself are merely a cunning rehearsal of the conditions by which they are called out in the mind. All organic response, or instinctive response, of the physical man to the impressions of sense fall short of knowledge till the rational construction under these rational forms has taken place. Faithful analysis gives them both, and is compelled to refer them to different sources, the sense and the reason respectively. Thus perceptions, the earliest product of the mind, which are to lie at the foundation of knowledge, are found to contain constituents from the external and the internal world, blended by reciprocal and inseparable action in one transparent product with the same certainty with which oxygen and hydrogen combine in water.

These first and relatively simple materials of an intellectual world come at once under the constant and more extended

action of the judgment, till they form parts of the general scheme of nature; constituents in our experience more or less extended according to our forms of inquiry and of activity. This addition of units, this weaving them together into the intellectual fabric of life, proceeds under the form elements of substance and cause. The reason adds to each group of phenomena the sense of reality, the feeling of an underlying something, more frequently called substance, which remains as the constant source of these impressions. The impressions and the reality are the equivalents of each other and make up a firm and uniform experience.

Associated with this notion of substance is that of causation. The forces involved are not passive but active forces, which govern phenomena in an orderly procedure, in a form of activity defined by existing circumstances. These two form elements of substance and cause enable us at once to build up a knowledge of experience more or less extended according to the attention we give it. This knowledge, which we are especially wont to call knowledge, contains, like perception, two different and distinct elements, one finding entrance through sensation and one through reason. Without the constructive form, knowledge is blasted in the bud; without the fixed terms of phenomena, it becomes visionary and fanciful, clouds which disappear while we look at them. Here, again, we have the two sources and constituents of truth, neither of any validity without the other.

So far the inquiry is kept within the ordinary forms of knowledge, and we find that the things we see and feel give rise to perceptions and judgments which contain two elements, parts contributed by mind and matter in reciprocal action. Our construction of events into an intelligible experience thus becomes a joint product of disparate agents. What men have everywhere and from the beginning regarded as knowledge, knowledge self consistent, reliable and capable of increase, is found, under clear and fair interpretation, to contain two forms of activity, and to reach completeness by means of them both.

We now come to transcendental inquiries, which the human mind is ever making, led to them by other form elements which remain to be filled out, and which carry the thoughts forward to their most comprehensive expression. The mental forms under which this wider survey goes forward are equally plain. The first of them is personality, that assemblage of powers which, under a universal rendering, give us the sense of manly endowment, spiritual presence. Dr. Hickok conceives this soul-power as involving unity, spontaneity, autonomy and liberty. They are not so much separate parts of one life as separate ways in which one life may be regarded. A pure

intellectual process, that in which the mind of man is most detached from physical relations, offers itself as something wholly distinct from a series of causes. Take the conception of a circle and a discussion of its qualities. Any affirmation we make concerning it, as that the areas of circles are to each other as the squares of their diameters, is established in a sequence of thought which has no resemblance to a series of causes, as when a rock is split by repeated blows. It is a process of its own order, a thought process, which justifies itself to the mind, and owes its conviction wholly to that fact. Such a movement of mind is spontaneous, autonomous and free. We often speak of liberty as if it found sole expression in an act of will. The truth would seem rather to be that liberty belongs to mind as mind, pursuing its inquiries according to its own nature, and making them less complete or more complete according to its own purpose. A process of thought cannot go forward without this liberty and not lose its own character, its own connections, its own integrity.

One of the most obscure and controverted directions in which the reason of man brings form to human judgment is the law of right, the law of righteousness. Such a law lurks in men's mental processes, in one direction or another, with one or another degree of completeness and of authority,—the more thoughtful the man the more authoritative the law. This law of right, which enters so often to constrain the actions of men, is closely associated with happiness, with conventional sentiment, and with the forms and enforcements of social and civil law. Yet it transcends them all, struggles to reconcile them all, and gives to them a distinctive pungency which they cannot otherwise obtain. The law of right is constantly changing its form and direction in men's minds, absorbing into itself many considerations of pleasure, of the growth of individual and general prosperity, and yet remains supreme over its constituent and associated ideas, inexpugnable, ever reasserting itself above all denial and beyond all explanation. The sense of right in many persons in reference to many forms of action, asserts an authority which they cannot escape, and which adds to disobedience a sense of shame and humiliation they cannot soften. The magnetic needle may easily vacillate and be much deflected from the pole, yet it still remains a constant guide in our voyages. The lines of the spectrum, aside from any explanation, are fixed characteristics of the elements which involve them. This sense of law, more supreme as men advance in intelligence, is inseparable from the rational mind in its outlook over the spiritual world. We may offer as a guiding principle, the greatest good of the greatest number, and yet it is the sense of right which interprets the precept,

not the precept which shapes the sense of right. The sense of right still remains to us to tell us what the greatest good is, and to enforce upon us as a law of action this good in reference to ourselves and in reference to others. A sense of law, of supreme law, still to be expounded in many directions and to be enlarged as it is expounded, remains with us; and by virtue of it the world becomes ethical, a field undergoing, slowly it may be but certainly, a spiritual construction. A universal expounding law is present which works its way experimentally and rationally into the government of the world, and makes of it the Kingdom of Heaven. Thus we find the world to be a spiritual kingdom whether we have or have not recognized its King. A notion which transcends all final statement is with us to give form to our lives.

If we add to freedom, exercised under law, both of which we refer to the spontaneous activity of mind, the notion of the infinite and the absolute, we are able to give to the universe, to the largest procedure of the world, an exposition which, like a discussion of the properties of a sphere, may still leave out many things we would be glad to know, yet holds for the mind the germs of truth which quicken and gratify to the utmost our spiritual life. Under these conditions the sense of intelligence, and ultimately of a Supreme Intelligence, comes to us as the true power of this system of things of which we are a part. With it arises a belief in immortality as alone giving room enough and incentive enough to carry forward these impulses, which we are beginning to understand, into a kingdom proportioned to their own magnitude.

We both see and feel that there is an evolution, and that this evolution is one which will justify all the ways of God toward man. These conceptions make the world supremely rational, though the lines of order may so far have been traced by us inadequately and obscurely.

This is but a summary presentation of the Rational Psychology, a volume of seven hundred and seventeen octavo pages, containing besides its primary theme many subsidiary illustrations and criticisms. The mind of the author was so thoroughly occupied with the constructive force of the human mind, that he proceeded at once to bring its regulative thought to the interpretation of the physical world about us. The first volume in this direction was Rational Cosmology, published in 1858, presenting a speculative physics and biology. In 1872 it was followed by Creator and Creation. These are extraordinary works in the sustained attention they imply, and in the extent of the phenomena which they embrace. They can receive from us only a brief presentation.

The preface of the Rational Cosmology contains a statement

which foreshadows the purpose of the volume. "It will thus ever be true of the finite human reason, that with the mere facts of nature he can never rise to any science of nature, and with the partial apprehension of the principle he can never follow it out in all its necessary determinations, and, hence, his only sure progress must be, first, an apprehension of the principle, more or less inadequately, and then a following out of the principle in its necessary laws by a reference to the actual facts that have already been determined by it. . . The facts are nothing for philosophy except as seen to be determined in their principle, but are much for philosophy when used by the insight for the development of the determinations of principle." The first chapter expands the idea of a Creator and the second and third chapters, constituting the body of the work, give a brief statement of the conception of matter as a product of mind, and then proceed with an extended tracing of the forms and laws of matter as known to us in a large variety of departments. The volume is a tentative application of a rational idea of matter to the various facts which are united under it in the general system of things. Thus the world becomes intelligible throughout by an apprehension of its controlling principles.

The second volume, whose contents evidently grew into distinctness as the author's mind, in the progress of years, came to dwell on these primary conceptions, elaborates more fully the fundamental nature of matter, and the construction which would arise under the antagonistic, diremptive and revolving forces which lie at its centre, and issue in a creation; a preparation for the various forms of life, and a rational product springing from the reason of God and addressed to the reason of man. The second volume covers the same primary ideas as the first volume, and employs them with the growing distinctness and confidence which arise from long meditation on them. The two books give a very clear example of what frequently occurs in philosophy. Increased familiarity comes to be the equivalent of increased proof. The mind conceiving its ideas ever more clearly is proportionately impressed with their explanatory power, repeats them under their later forms and justifies them afresh with each enlargement of light.

The second preface contains this statement in line with the one already given. "We must recognize a higher spiritual faculty than sense-experience, as an organ of spiritual philosophy which shall abundantly comprehend and confirm our theology; and therein may all scepticism be fairly met and answered. The phenomena of nature must be seen to be ordered by essential forces back of the appearances; and also faith in theism must rest on truth known to be beyond nature

and determining the order of nature, though known by the insight of reason in nature."

In the same year, 1872, in which Creator and Creation was published, appeared *Humanity Immortal; or Man Tried, Fallen and Redeemed*. This work came as a natural completion of Rational Psychology and Rational Cosmology. It gave the final defense and support of the system of theology which the author had for so many years presented. His conception of the divine character and of human liberty led him to regard human destiny, man's relations to God, in their most inspiring form. The comprehensible and the hopeful received far more emphasis than the obscure and portentous, and thus it became a most assured and grateful issue, that we, too, should reach the presence of Pure Reason.

The closing volume, *Logic of Reason*, was published in 1875, and was a return to the key of the whole structure. Dr. Hickok was so profoundly occupied all his life with his ruling idea that no additional light was without interest to him, and no repetition disturbed him. Enlarged apprehension came to him as superior light on the spiritual landscape, a pushing forward one step further toward the coming day. Dr. Hickok had also such a constant sense of the partial and inadequate presentations of truth in current forms of philosophy that some critical and constructive and corrective process was ever arising in his mind, and pushing forward in immediate, effective use.

Thus the *Logic of Reason* opens with a full discussion of transcendental and of empirical logic, and then passes on "to discuss those forms of force and life which are the substance and essence of the universe." Reason is put to the test of reading in the facts of experience the principles conditional for it, the things which have preceded it, and to determine the order of inherent, adherent and coherent connections in all phenomenal observation. Whatever else we may think about the philosophy of Dr. Hickok, he did not propose to himself any secondary or insufficient purpose.

We are not to conceive of the philosophy as thrown off at a single heat. It was rather a growing light to which the eye became more and more accustomed, by means of it gaining a clearer revelation of the visible and invisible world. Hence the constancy with which he returns to it, and his sense of something more adequate in each fresh presentation. His mind worked like the mind of Spinoza, intoxicated with a conjoint vision of nature and God. During a long, spiritual, thoughtful and peaceful life, the dawn of reason passed into the dawn of philosophy, and the dawn of philosophy into full day in which one seems to see even as he is seen. It is no

more necessary that the thought by which we apprehend the mind of God should be altogether perfect than it is that the light which discloses the world should be everywhere present and complete.

I am not willing to close even this brief sketch of the system enforced by Dr. Hickok without some estimate of its validity. The Rational Psychology, passing by secondary and verbal criticism, seems to me to go straight to the root of our intellectual life. We cannot, by any adequate analysis of our sensuous experience, reach the forms of thought which belong to a rational handling of the world. Moreover, this joint product which arises between mind and matter is in harmony with what we meet everywhere. No finite cause by itself alone creates and gives character to an effect. In every effect, every combination, we have at least two agents which concur in the result. Nothing lies wholly passive to receive the action of other things, wholly active. We have also in this philosophy of reason a vindication of the fundamental constitution of the mind and an acceptance of universal knowledge. Man, in the repeated and spontaneous use of his powers, has reached results which combine these two elements, physical fact and intellectual interpretation, in a manner accordant to this conception. Nothing which disturbs the foundations of general knowledge can be conceded, for this is to render knowledge self destructive.

A most important criticism to be made on this portion of Dr. Hickok's work is that he speaks of consciousness as an inner sense. It may much better be regarded as itself a form element, essential to a large class of phenomena; those we know as intellectual phenomena. What space is to physical facts that is consciousness to intellectual facts.

When we come to the use made of this psychology in cosmic interpretation, conviction drops off. The view presented casts light only here and there by accident, as it were, and leaves the great mystery of method untouched. My first contact with Dr. Hickok was, as I have said, in 1851, in the seminary at Auburn. I had already begun to find difficulties in the religious dogmas in which I had been brought up. The atonement seemed a human device consistent neither with ethical law nor God's revelation in daily affairs. I was glad to give weight to Dr. Hickok's opinions as relieving an uncomfortable pressure. He did not attempt to overcome my doubts by any severe rendering of the idea of justice, but urged that the atonement was to the human mind the most obvious and adequate presentation of the divine mind toward sin and toward men. Rejection of sin on the one side and grace on the other were clearly and adequately brought out in this doctrine. This

reasoning for a time satisfied my mind, but later the old difficulty revived. This method was not in harmony with the government of the world, the government expressed in the parable of the prodigal son; not in harmony with the fact that repentance always carries forgiveness with it. Thus once more dogma became a scheme put upon the world and not found in it.

I had from the beginning much the same feeling in reference to his conception of the forces, antagonistic and diremptive, by which he proposed to explain the universe. They brought their own difficulties and gave no revelation as to the nature of things about us. When we are dealing with the most familiar phenomena, we get quite beyond our depth, if we undertake to put another series of facts back of them. Take, for example, a ball flying through the air under a blow from a club. Does the ball differ from what it was before it was struck, and how will it again differ when it is brought to rest? The facts are uniform and plain, but how came they to be exactly what they are? It helps us very little to imagine the ball in motion to be charged with something we call force, and to lose it again when brought to rest. The acquisition, the intermediate state and the loss still remain mysterious. To inquire exactly what the phenomena are, that is science; to see the purpose subserved by them, that is philosophy, but any imaginary intervening mechanism is not even knowledge. When we come to the how of things, it is to get over the insuperable difficulty which arises in the mind that we assert the presence of Infinite Spirit. We can give to intermediate notions of matter and force no such form as to remove the sense of ignorance we experience the moment we reach them. It is equally a false form of knowledge to deny the reality which we cover by matter and force and to attempt to explain it. True philosophy stops when it is through, and offers no explanation of noumena beyond the noumena themselves. The noumena are not in the explanatory series, but superinduced upon it. We accept them as inseparable suggestions from phenomena, known in the degree in which we know the phenomena, and playing their entire part in connection with them. What we know as force has many phases, and each phase finds expression exclusively in one set of phenomena. The more absolute this identification of each force is made with its own phenomena the more adequate our knowledge becomes. We are not, like the Indian, to explain the steam engine by a horse enclosed within it; the engine explains itself. The simplest exposition of gravity is the bare fact that ponderable bodies attract each other. This statement is the substance of what we know, and all the knowledge of which we can make any use.

Dr. Hickok is by no means alone in putting notions back of notions, vague realities behind obvious realities. Yet no philosopher advances one step in knowledge by this method. Take the doctrine of inheritance. What we need is the facts in fuller measure, to accept them in their own form and to keep away from them any unverifiable conceptions—conceptions which are sure to affect our estimate of the facts themselves. Gemmules and physiological units may seem to help the doctrine of inheritance, but before we are aware of it they will divert attention from what is, to what ought to be under their intermediate agency. We are overrun just now in psychology with fanciful forces which we can in no way locate or expound. Visions and suggestions, shaped in an unconscious region, come crowding up by a subliminal passage into the mind where they serve to confuse in wonderful ways the actual phenomena of intelligence. The more we shape for ourselves such appliances the less we shall know of what are the actual, verifiable relations of thought and physical facts; we shall slip away from the world of realities into one of shadows and moonshine. The fact and adherence to the fact are the first lesson of sound inquiry. If what we term "new psychology" were called neural dynamics we should know much better what we are about.

While pure mathematics is an obstacle which the empiricist has never been able to push out of his way, it has also at times been a snare to the intuitionist. Its conclusions are so absolute, so independent of experience, that it seems to move in a region quite above facts. Its units are perfect units, its definitions without ambiguity, and, wherever numerical form alone is involved its conclusions are unimpeachable. When, however, in mixed mathematics the discussion pertains to real things, the absolute quality disappears. We manage with much labor to secure proximate units in weights and measures, but when we come to estimates of mind, as in values, we are quite at sea. The purchasing power of a certain number of dollars is constantly in fluctuation, has no measure. It turns on the form of currency, the state of credit, the market in which it is tested, the articles purchased, the state of mind of buyer and seller. Values, like tides, are coming in or going out, and are liable to play us unexpected tricks.

When we reach social or artistic or intellectual or virtuous quality our numerical estimates are so much at random that we rarely offer them. Statistics, their most common form, themselves need interpretation before we can by means of them either affirm or deny anything.

We are disposed to push mechanical notions and measurements quite beyond their application, simply because they do

serve at times to render our knowledge so complete. Even the universal belief that matter is indestructible is an induction resting on relatively few facts. The equivalence of forces is by no means the broad principle which we sometimes think it to be. It is not an assertion that forces in distinct amounts displace and replace each other, but that a few forces, under mechanical relations, may be made the means in expenditure of calling out other forces of a like character. Fuel consumed in a steam engine is not replaced as regards force by an electric accumulation, or by mechanical energy. In its own dispersion, it gives rise to a distinct accumulation of force which may in part take its place, awaiting in turn some other form of dispersion. The locomotive runs one hundred miles. It might have run more or less, or stood still on the track. The heat, ready to produce motion, is lost, and does not reappear in any other form. There is a conditional dependence of one form of force in its generation on another form, but each remains subject to its own circumstances. In the solar system forces are constantly suffering dispersion in large amounts.

The forms of undue extension given to conceptions by the empiricist and by the intuitionalist are often much alike. In the discussion of the origin of species, there are two considerations of very unequal importance. The first is how come there to be suitable varieties, in the character and amount of the changes involved in them? The second is the tendency of these varieties to survive. The survival of the fittest approaches a truism. No one is disposed to deny it, and it is kept in the foreground. How the fittest comes to be is a much more difficult inquiry, and is inadequately treated. The intuitionalist can readily, if any given effect is to be secured, insist that means, akin to those actually employed, become necessary. This assertion is not expounding why, in spaces and periods unoccupied, these results, or indeed any results, must arise. A movement once started, a certain power of prediction goes with it, but whence the movement itself arises is not a forecast of our rational powers. So it is in any affirmation we can make concerning any actual event, the necessity lies in the relation of one part of it to other parts of it, and not to it as one whole. A strong argument for a Divine Agent may be framed from the profound and innumerable interdependencies of the physical and the intellectual worlds, from the fact that they together unite in one universe; but any necessity which goes to show that these results are inevitable, locked up in antecedent connections, reduces not enlarges our sense of the need of a Divine Presence.

Our true attitude seems to be a close and extended inquiry into things as they are, a sense of the mystery of that power

which, point by point, makes them what they are. These are the facts with which we have to deal. A universe according to Spinoza, or according to Spencer, or according to Hickok may seem for a moment more intelligible, but is in no way so instructive, so stimulating, as a universe in which the mind moves freely, a universe constantly disclosing new phases of power.

Many theories to which we are disposed to attach importance simply hide that eternal development of thought from thought, method from method, which confronts and feeds the mind, and puts it on terms of intercourse both with the known and the unknown. We certainly may know all we can know, see all we can see, but the thin mist of speculation we spread over the landscape often conceals far more than it reveals. It has been affirmed by one entitled to an opinion that the philosophy of Dr. Hickok is the most comprehensive and original of any, which up to his time had appeared in America. This statement seems to be just, if we consider the circumstances under which it arose, its scope, and the soundness of thought and method.

It was brought forward as a defence, on the one hand, against the stolid assertion of Scotch philosophy and, on the other, against the volatile speculation of Transcendentalism. The two manuals, one on psychology and one on ethics, marked an era in instruction in Amherst College and became influential elsewhere.

This system also covers the entire field of philosophy. Dr. Hickok, during a long life, had in mind the complete philosophical problem, psychologic and cosmic. He was profoundly interested in any philosophy which strove to cover and support human knowledge in its several forms. This interest is seen in his frequent criticisms, and in his extended treatment in his *Logic of Reason* of the various comprehensive forms of thought hitherto offered. His feeling was that philosophy stood for a well rounded system applicable to all forms of inquiry. It was this conviction that led him to take up a second time, after so long an interval, the cosmic problem.

The justness of his general method, notwithstanding the undue extension given it in physical discussions, must be freely conceded. His seven volumes, all devoted to one self-assigned task, started in psychology, a study into the scope of human powers, and at the close returned to it in the *Logic of Reason*. Though the rational element was given the foreground in every inquiry, yet the method of approach was primarily empirical. His rational and empirical psychology alike rest on a careful analysis of the facts of consciousness. Knowledge in its incipiency is shown at once to hold the empirical substance and the rational form of truth. His cosmology, not-

withstanding its speculative scope, deals directly with the forces of the world, attractive and diremptive, and strives to make out of these the substratum of all physical things. Dr. Hickok thus achieved a comprehensive system of philosophy, pervaded in all its parts by a temper both rational and empirical; a system venturing further and with more sobriety into the field of knowledge than any which had gone before it in America.